DARLENE MCLENNAN: Welcome, everyone. It's Darlene McLennan here, the NDCO for Northern Tasmania and the manager of ADCET. Thank you for joining us today. Firstly, on behalf of ADCET, I'd like to acknowledge the traditional owners of country throughout Australia and recognise their continuing connection to land, waters and community. We'd like to pay our respects to them and their cultures and to Elders past and present. We would also like to pay our respects to Australian's first peoples joining us today. Today I have the pleasure of introducing Jim Sprialis. I've known Jim over many years and it's always a delight to run into him at conferences as his passion and enthusiasm around technology and how it can support students with disability is infectious. Jim has nearly over 30 years' experience as an educator and a technology consultant. I've heard Jim present on Sonocent three times now and each time I learn something new and I grow in confidence on how this software can benefit the students. But before we begin, I just want to say a few housekeeping items for those who haven't joined us before. Today, on this Webinar, is live captioned by Tina from Bradley Reporting and it will be recorded. The recording will be placed on ADCET after the recording has been captioned and this may take a week. Unfortunately, the GoTo Webinar platform is not as accessible as we desire for screen reader users. If you are a screen reader user and have any questions or want to ask any comments please email adcet.admin@utas.edu.au. For just your information as well, we have muted you all and this is to ensure that there's little background noise received during the Webinar. The Webinar will run for 50 minutes and there will be an opportunity for questions at the end. But throughout the presentation, feel free to enter your questions in the question pod and I can ask those questions at the end of the presentation. Or if you're confident that you have a good headset and a microphone and would like to ask questions at the end of the presentation, feel free to raise your hand, which is in the little box there, the Webinar box thing there and we'll unmute you, and you can talk. And finally, just if there's any technical difficulties throughout the Webinar, please feel free to email us, well do email us, don’t feel free, at adcet.admin@utas.edu.au. Now I'll hand it all over to you, Jim. Welcome, and thank you.   
JIM SPRIALIS: Oh thank you Darlene and Jane and thank you to everyone else involved with ADCET for inviting me today to speak to you about the changes that are happening with technology all the time and I'm really pleased today to speak about the changes happening with technology, to address note-taking. It's been a barrier to learning that's been a real issue for many years in terms of types of technologies and accommodations that students can use. So in today's session and I do note that there are some familiar names amongst the attendees list and welcome to those people who are familiar with Audio Notetaker, because for those of you who aren't, today I'd like to do a number of things. Certainly talk about the impact that Audio Notetaker has had for students around the world. It's been around for about ten years now and initially was produced to support students with dyslexia in higher education in the UK and it's spread its way to the US and a couple of years ago started to have a presence here in Australia. So we'll talk about some of the impacts that have been documented with the various institutions around the world and we'll talk a bit about some Australian institutions, as well. And for those who are not familiar with the technology, we'll allocate a short passage of time just to unpack what this technology is about. I'd like to say upfront that you need to remove from your mind any view you have in terms of how students approach note-taking with technology. The way this technology has been built flips that on its head and that will become a bit more apparent during the Webinar. Anyway, I'll move on and as Darlene said, just quickly my background information. Has it moved to the second slide?   
DARLENE: No Jim, it hasn't.   
JIM: Now it has. Thank you. Yes, so I was with the Education Department and in various roles and have been very passionate about assisted technology and inclusive technologies for many years and was the State Manager here in South Australia, but now I service, in my own consultancy role, workplaces, higher education and schools and as you can see there, my knowledge base around technology has quite a big range. I do a lot of voice recognition support, as well as being an Australian representative for Sonocent, which I'm really, really leapt at when the opportunity arose. I've been around for a long time and maybe sometimes for those of us in those highly specialised roles whether it's assistive technology or whether it be in some other field, when things come along and everyone gets excited around you and you tend to be fairly muted, because you have that lengthy experience, I must say, when I really realised what this technology can do, it really reignited a whole new passion for me, a wow factor and hopefully you'll see why during this session. So what we hope to do during the session is firstly touch upon the importance of effective note-taking and what challenges students with disability and include those students with learning differences have with note-taking and perhaps that leads onto well, how can we make that the strategy of note-taking and developing their study skills more effective for students? and then we'll talk about the work space that Audio Notetaker is and then we'll talk a bit about lecture captures and flipped content, which is something which is very timely when it comes to Audio Notetaker to consider when we're talking about the accessibility of flipped content. A lot of the session today we're also going to talk about some data and I'll be sharing that data from various institutions that have conducted pilot projects around the world and here in Australia and hopefully we'll have some time for some Q&A at the end. But firstly, let's just go back and talk about, and remind ourselves a little bit about the importance of note-taking and how it directly correlates with academic success attainment and some of these quotes are from a number of years ago, but there are some that are more recent as well that reinforce that tight link between effective note-taking and academic success. Now just quickly, these are quotes that I've cited here on this slide, the links to all the journals are listed on the final three slides of this presentation, so you can certainly go and access those research materials for further reading if you wish. So when it comes to note-taking, I think we remind ourselves how complicated a process it is for anybody. I know that when I go to conferences and if I had relied on just the traditional form of approach of using pen and paper and so forth, how difficult it was to make sure you capture the critical points that the presenter is talking about and when we consider people speak at anywhere between 120 and 160 words a minute, even greater, it can be easy to miss critical information. The demands on cognitive load are immense, so for those students that you work with, the students with disability, or have learning challenges, they've got those additional road blocks on top of that incredibly cognitive task of note-taking. They may have memory difficulties, whether it's short-term memory or working memory challenges. They have poor spelling or concentration, so that will impact on the quality of their notes and certainly for some of our students who have a great level of barriers, we have got some things in place where they can, we can accommodate those barriers whether it be peer note takers, or something like life scribe pens or lecture captures and so on. So, it's a timely reminder to know it's a really, really tough task for all of us, let alone for students with disability and this was hit home with a survey that was conducted in 2016 and in this survey which was given to students with dyslexia in higher education, where they were asked to list their biggest concerns with higher education study and the typical ones certainly are very high up. Everything to do with written tasks is certainly there. Written exams, written course work, expressing ideas in writing, organising essays. But as you can see, I've highlighted in orange that note-taking came out in this survey as the number one concern for that group of students that this survey was given to. So how do we go about making sure we make note-taking effective? So, it's really broken down into two steps. Obviously we need to, as I said, make sure we capture everything that we process and then find ways that we can work with that information and to summarise it and synthesize it. So let's just take this notion and translate that to when we read an article or some sort of journal. We obviously have the print there in front of us so it's captured there for us, it's there for us to view permanently as we visually process it and we can go through it and use highlighting pens or sticky notes, or ways that we do something actively with the print to help us make better sense of it, to activate comprehension strategies. We might highlight bits of text to pull out the main points or we might highlight a certain colour, phrases and or vocabulary that we don't know what it means, so we need to go back to that later and follow up on it. Well, that gets rather difficult when students are required to do that when they're listening to someone, and that's where this technology can really assist those students to start to process audio information. If we can find technologies where they're not just passively listening, but as they're listening to information, they're doing something kinaesthetically or strategically to activate active listening comprehension that's going to help with long-term retention. And this will become a bit evident when I start to talk about Audio Notetaker. Importantly, I think the big part is that not only should the learning be active, but I think the process needs to be done with the greatest level of independence, as possible. I know we have in place peer note takers for students who really struggle with note-taking and certainly in those scenarios, we really need to ask ourselves, to what level is the student actively processing that spoken information if there's someone taking the notes for them, and do those notes really become tangible and connected to the student if they're not actually actively reflecting upon that information by doing something with it as they hear it? And so certainly what I find, whether it's accommodations that you have in place or a note taker, that level of independence that students get is really critical in them becoming empowered with their learning. And this is what I'd like to talk about now, how that happens with Audio Notetaker. So we're on slide nine and here on this slide you can see two screen shots. A screen shot of the desk top software and a screen shot of the free companion app which can be used with iOS or android devices. I'll leave the app for now. They both do the same thing when it comes to the first few steps of the note-taking process. So let me describe what you can see on the screen. In the computer screen shot, you can see that there's the software across the top, there's a couple of features about to turn things on like the microphone, record and/or the tool bar. Actually, what I might do, I might actually go to a couple of the next slides and go into a bigger view of it, so you can see it. Let's just go and have a look at that, so we can see it in action. Hopefully this will be a little bit clearer for you. So here's another screen shot of the desk top software and as I said, you can see across the top all the tools that the student can use to work with their captured information. In the work space, you'll see that there are three columns that are evident. The first column is where students can import images, or PowerPoint slides. So perhaps prior to going to a lecture, a student can go into the learning system, download the PowerPoint and import it into the software. The next column is where students can take text notes and I'm actually going to say that we don't discourage students, but we don't really encourage them to type too many text notes. The reason being in the third column you can see there's a column called audio, or a pane, it's called a pane, but we'll call it a column for now. In that audio column you'll notice that there's some blue bars that have appeared in that first row on that column. So what this screen shot is showing is a student has pressed the record button and audio note taker has detected audio and has immediately visualised it and put it into the work space as those blue visual lines. So all of a sudden, we've got this very transient modality that is spoken information and we now have had it converted into a visualised bar that students can actually work with. The critical thing is, like I said before, where students are using highlighter pens to go through reading material, a student can now use highlighter pens built into the program to annotate that spoken information. So here on slide 12, you can see the student listening to the lecturer, as the lecturer says something really important they've pressed a keyboard shortcut to highlight that bit of information in red, or they've highlighted a bit of information in green, because the lecturer has referred to a reference point, to a research article somewhere. So what the student can do is they can now engage in active listening comprehension, apply strategies to summarise, to identify unfamiliar content for review later and as the next slide shows, they can really start to build high-quality notes, because it's still in audio format. They haven't had to worry about those barriers of having spelling and writing difficulties. They've stayed in that audio modality and they've still been able to engage in comprehension and engage in that first step of working towards summarising their notes. So, as I said at the beginning of the presentation, you needed to remove from your minds any traditional views you have of note-taking. It's a very different approach with this technology. So the students can actually colour code prior to the lecture and rename what those colours could be. So they can create their own legends. So, in this instance, red is important, green is for reference, orange is for unfamiliar terminology that's used in that subject matter, words used in the lecture. The blue colour is the task, so the lecturer at that point in the lecture has mentioned this is what you need to do by a certain date, so the student highlighted it in blue. This all makes it easier after the lecture for the student to return to this recording and quickly locate the bit of information that they need to go and review and listen to again, whether it is the tasks, now what do the lecturers say, when was that view again? I'll just go to this blue bit and play that back, because that's where the lecturer said that part. So students have got the scaffolding of the tool now to really more efficiently work through and review the lecture capture or the tutorial because it may be the student might use Audio Notetaker in a small group with students where there's no lecture capture available and they can still come away from that learning session with their notes in this format, in this multimodal format, where there are pictures and slides and so forth. So this is where the powerful part happens. After the lecture and students need to review their notes, we know and research has told us many times that students should be reviewing their notes regularly, almost the next day after their lecture, then again within the next week, then again two or three weeks later and on a continuing basis to move that information to long-term memory, to assist with retention, prepare them for an exam, or prepare them for some sort of presentation that they want to do. So this is where the technology helps students develop those study skills, because what they can now do is start to export that summary. So let's say all those parts in red and all those parts in orange that are to do with the vocabulary of the subject. They're the only parts the student may want to listen to when they revisit. Now rather than open up this entire file again, which may be a 1-hour lecture, wouldn't it be great if they could just have a file with just a summary, like an abstract of the notes and that's what the technology can do. So here on Slide 15, I've clicked on the extract feature that's built into the program and the student has selected just the red bits and the orange bits that they would now like to extract from this recording and make it into a new recording. So once they've clicked okay, basically what they have now is they still have the PowerPoint slides, some initial text notes, but now you can see, all they have is the critical information to go back and review. So the ability to now have that summarised is the first step to really powerful ways that study guides can be repurposed. The students can now choose to get this summary and repurpose it into a number of formats. I've clicked on the export button and you can see there's a few choices. If the student wishes to have it as like a play list, they could go to make an album out of it or even an iTunes album and export these tracks into a mobile player. Or if the visual information is important, they can extract the PowerPoint slides and the audio and make a little video and put that on a mobile device to play it back. Alternatively, they can export out the text with or without the images into a Word document and maybe for some students they prefer to have a printed format as a study guide, and there is now a new option, which we'll talk about a bit later in the session called audio transcription, so that's an option where students can export the audio and send it off to a human transcription service that's linked to Audio Notetaker and get back a transcription that's linked to all their slides. I'll talk about that particular transcription service in greater detail near the end of the Webinar. But coming back to those first few options of how students can summarise, if a student had chosen to export it as a video, here's a screen shot showing the PowerPoint slide on the video as the lecturer's key points are being spoken and when it transitions to the next bit of audio, the slide will change to the corresponding audio. And students, this is a very popular way for students to create study guides, particularly study guides where there are ... it's important that the images are in the video, because they may have graphs or some sort of equations that students need to visually see as they hear the lecture. Alternatively, students can export just an album play list of MP3 tracks. So those little images you can see on the screenshot here are thumbnail pictures of each slide and the files are just named track 1, track 2, track 3, right up to track 10 and students can jump to whichever track they wish to listen back to those study guides. So it's a very empowering process to be able to repurpose your notes and have them stay in these various multimedia formats and, of course, the other option is that students can if they wish use more traditional means of study guides and export the PowerPoint slides and the text into a Word document. So they're the multiple options that students can use. Now just quickly, I will talk now about the app, as it is, just to let you know even though students might have the software, in reality about 80% of them use the app, the free companion app to do that initial stage of capturing the lecture or tutorial and annotating what's captured and then put into the software later. So these screen shots just show you the interface on an iPhone, where students are doing pretty much the same thing that they can do on the computer version - colour code the annotations, they can use the built-in camera to take a photo of the PowerPoint slide, or if they're in a small tutorial they can take a photo of some sort of graph that's being put on butcher's paper, so they can add that into their notes, as well. So if they do capture some content on their mobile device, such as you can see here, this screen shot of something on butcher's paper, they can also alternatively just use the scribble feature built into the app to draw out, or annotate over a photo. So it really makes the process of note capturing quite interactive. So let's say, for example, students have used these two images in their app recording, they would then get the app and connect it to the computer and sync across the recording from the mobile device into the software and so here you can see a screen shot showing how students have imported in their recording, the images are there, a bit of text is there and certainly all the annotation they've done for the audio is certainly there, as well. And so students can now do those next steps where they might summarise, they might go back over it, change the annotations to different colours, they've changed their mind about how important some information is and start to work through that recording and refine it. So just to recap, that was just a quick series of screenshots to show you the unique nature of this quite innovative program and how it works. So just to recap, it does capture everything. So that level of anxiety that students get with note-taking certainly reduces quite significantly. Importantly, students can apply active listening strategies, comprehension strategies, colour code something that’s “I don't understand, I need to go back to”, or colour code something "oh yes, that relates to this" and they might choose to choose the colour orange for that sort of thing and all the while they can start to synthesize that information, because it's all linked together with the corresponding slide and the text and importantly, they can extract key points and repurpose it, whether it is for study guides or written assignments. So I thought it was important to recap that information, okay. And as I said, audio spoken formations are very transient modality, so that visual representation. Now I believe it creates a real tangible cognitive bridge between that information with the tools that are available and the technology, it can scaffold the students applying their study skills to that very transient modality. And, of course, with greater independence which is what we really want to have anyway, because as we know when students graduate, they're life-long learners. They may enter a workplace where there's on-site training or they're asked to go elsewhere to get up to speed with something and if they've developed good note-taking strategies and have a technology like this available, they can use it for their employment learning and I do actually have, have worked with a number of young adults through Disability And Employment Services, clients, and I've gone into their workplace where they've been trained and have been using Audio Notetaker to help them with their work and I'm happy to talk about that after the Webinar, if you don’t want to, contact me by email and I can give you a lot more information about the workplace context. So let's talk a bit about lecture captures. The lecture capture approach has been around for quite a while and it's purported to help students get around note-taking problems, because we can provide them a copy of the lecture and they can start to go through at their own pace, return to that material as they need and use it as a learning object. Interestingly, as recently as 2016, a number of studies by Elliott & Neal in 2016, Danielson in 2014 and a few others a couple of years prior to that came to a conclusion that recorded lectures had little or no effect on student results. So I think in many ways that could be linked to the passive way that students are viewing lecture capture recordings. It might not be that they're actively engaged in active listening comprehension strategies and doing something with that content and because it is a learning object. It is a stand-alone object, so when students view it, they are actually using something quite separate to start to write down what they heard in that lecture capture video recording and it's quite a disjointed, almost separate process in itself. So before I talk a bit more about that, let's talk a bit about how students do use lecture recordings and on your screen on the left-hand side you can see there's a graph that shows the frequency that students access recorded lectures and early on in the semester there's little or no access to those recorded lectures. As the time approaches for mid-term or mid-semester exams or tests and other assignments, you can see it spike with the use and so a lot of students will go back to these lecture recordings for revision and try to take notes from them. Interestingly, I think in a way in that previous slide where Elliott & Neal mentioned that recorded lectures had little or no effect on student results, I think you can see with the list of behaviours there, when students are accessing those recordings they're having to pause a lot to think and make notes and write notes. 84% to 94% of students have to do that and so it becomes a very disjointed revision process. There's nothing fluent about it. It doesn't help that 55% of students eat and drink or 25% browse on Facebook and email at the same time, so that's more to do with concentration and attention to task more than anything else. But I do think because it's two separate objects it is a disjointed process when it comes to revision and note-taking. The other thing that I think has a big impact is the level of fatigue and particularly for students with dyslexia, it's a very time-consuming process to go through a lecture capture, re-listen to parts that they have to hear again and then look up things that they're not sure of. So as this student put in her quote, she says, I will spend two hours, two and a bit on a 1-hour lecture, because I stop it, take lots of notes, re-listen to bits, Google a word that they’ve referenced that I didn't know or I've forgotten. It is quite a time-consuming process and perhaps in many cases students don't end up going through the entire lecture recording because of that fatigue level that can build up or that cognitive load has a big effect on that. So that's where I think, Audio Notetaker comes in nicely with this notion of recorded lectures or whether it's Webinars or flipped content. So, for example, this Webinar today, one of you in the audience could have had Audio Notetaker running in the background and you could be annotating and capturing this Webinar into a format that makes it easy for you to go back to and look at your notes and find the coloured parts that you've annotated for more quickly. So it is about making more accessible notes and that's critical when it comes to having a more accessible education. So the beauty of Audio Notetaker is that you can send students off to a YouTube video or a TED talk and as that video is playing Audio Notetaker will start to detect and bring in the audio information and students can start to highlight and annotate it and they can take screen shots of critical scenes in the video, if required, and start to build up that really accessible format of capturing that video, or whether it is a lecture capture video, as well. So hopefully that gives you a bit of an idea of how the program is quite unique and how it can be used in any context to capture spoken information, whether it's live in the lecture theatre or live in the tutorial room, out in the science lab with the app, whether it's a Webinar, or a flipped video, Audio Notetaker can be used to capture that and put it into a more accessible format. So a number of universities in the past few years have been trialling Audio Notetaker, with pilot projects and so I've been able to spend a bit of time talking about some of the data that has been collected from that, as well as data from institutions and pilot projects, Sonocent themselves do a really big survey of students around the world, every 18 months or so. The next survey should be released any moment now, which was done I think about 4 months ago and I know it involved about 1200 students. This one is from the end of 2016, or June 2016. It involved 929 students from around the world and some quick interesting information. That's obvious information to me, but obviously not if 95% of students use it to take notes. Well that’s obvious, cause that’s what the program does and that’s how we found out that 78% of students actually don’t use the software for that first stage of capturing their notes. They tend to use the free app, whether its android or iOS, and 77% of students use the program outside of lectures, so in other learning situations, which is great to see. But as you see from the pre and post questions, there's quite a big change in students' opinions of what they think of their notes. They thought their notes, only 25% of students thought their notes were good before they used the program and then went up to 98%. The other statements there that the students had to agree or disagree with include, ‘I was more engaged with my lectures’. Students were, before the program, about 40% of students said they were engaged during the lectures and when they're using the actual program, some 95-98% are engaged and I think that's got to do a lot with the fact they're listening and as they're listening they're annotating. They've been much more actively engaged in that process of comprehension. So you can see there's quite a few other statements there, but they're all fairly consistent in the benefits that the students are seeing and that's really powerful messages to tell us directly from the students themselves of how beneficial they find using Audio Notetaker. Now a number of staff who conducted pilot projects have also given feedback. One of the earliest adopters of a pilot project was the University of Nevada in Reno and Darren McCarthy spoke a lot about, in his Podcast, their existing accommodations and I was listening to the Podcast actually and he mentioned that prior to using Audio Notetaker, they had peer support, peer note takers and they had some 250 life scribe pens they were trying to manage. I didn't put it in this slide, but he did say that after introducing Audio Notetaker, I think they still had about 30 life scribe pen users and the remaining students switched over to Audio Notetaker. Life scribe pens have a place as a note-taking accommodation. I think they're a very powerful tool and for some instances, it could be a more appropriate technology than Audio Notetaker. I think that's changing. Up until now I think anything to do with equations and science and algorithms and algebra is certainly really useful to use a digital pen with, but now that we’ve got that scribble tool in the free companion app, that does address that to some extent as well. But anyway, coming back to the results that Darren experienced after implementing his pilot project, on average 80% of students improved one full grade average. Now they use a 4-point scale there and so they had a student increase, for example, from 3.2 to 3.4, but interestingly you can see from the different areas of the university, different faculties, there was quite a big improvement in the education faculty. Some improvements in others, but certainly in the education one there was, or where there is, I think, more the humanities where there's lots of spoken information. So I didn't put the link here, but I might do that afterwards, post the links for you to the Webinar where Darren goes into great detail about the impact that Audio Notetaker had. The other link I would like to send you which is a more recent pilot project, so this pilot project was conducted last year at the Tennessee Technological University by Edward Beeson. When they decided to take on board the pilot, they decided immediately to target students at risk who were on both probation, many of them looking likely to not continue at the institution in the next semester. So he identified those 25 students who were at risk of failure and implemented the technology and you can see it on the screen there, some quite significant leaps in some areas. The last one there on computer science, the students involved there who were obviously doing very, very poorly and were probably not going to return to the institution had a 2.81 grade point average increase. Others had less grade point average increase, but we're going to get that variation. So at the end of it, Edward was saying in his Webinar, he was just absolutely thrilled for the students, because all of them retained their place at the college the following semester, that he had strong views that a few of the students most likely wouldn't be coming back and you can see in his quote there in green on the right-hand side of the column where he talks about at length about one particular student. So what about here in Australia? Oh, now, before I go and talk about Australia, Sonocent has links to a number of pilot projects. They run a lot of them in the US and every two or three pilots that are run is actually then reported out as a Webinar. So there's a lot more that you can actually access, which I'm happy to give links to but I picked out those two in particular, because the University of Reno were early adopters and the Tennessee Technological University had some really incredible results with those students who are at great risk. So here in Australia, we have had some institutions start to use the program. Curtin University was our early adopter here in Australia. I think it's almost two years now that it's been in use at Curtin and certainly Karen Darby I have regular contact with, is always going on about how powerful an accommodation program is for her students. I'm based here in Adelaide, so I have the fantastic opportunity to go and visit some of the lovely people at University of Adelaide with Karen and Ngaire and the rest of the team there and Annie, so I have regular contact with them and certainly in our conversations they've relayed to me how it's allowed students to take greater independence and control over their note-taking and enhance the quality of their notes and not rely on peer note takers and that's a common message that's also coming out of Western Sydney University. Nola Baker ran an in-depth pilot project at the end of last year, the second half of last year and now I'm going to actually talk a bit about that project that Nola conducted. She has a specialist role in assisted technologies at western Sydney and her, along with her team, really did a very rigorous pilot project to gather their data. So these are the points that Nola has provided for me and I just thought I'd mention that Nola and I and Sonocent are working on creating the report and can let you know when that's available. In some shape or form, we are looking to have hopefully maybe host another Webinar where Nola herself can share with the audience all the things that came out of her pilot and how things are going now this year with Audio Notetaker. But during the pilot, she found that the students were very quickly taking on board the technology and using it how it was designed to be used. You know, colour code, the important value of the information, compare it with the slides, create those summaries that I mentioned that are really important so that students go back and use those summarised versions for revision. You can see there's a quote here from a student called Wayne on the Campbell Town campus where he talks about being able to focus more on the parts that he had trouble understanding. So it gave him greater clarity and I think probably the ability to be more efficient with processing his information. Uh, I think I forgot to get to that, so this is the slide I was talking to, it’s just come to it. I'm just going to jump to the next slide, sorry about that. Here's more information that Nola has provided and when doing surveys with her students after the pilot, most of them have reported increased ability to concentrate and stay on task and the ease of use. One of the things I get asked by many disability advisers is "Oh well, what sort of learning curve is there to using the technology?" And the program is really well supported to get people up and running pretty quickly, but what I like about it, it's one of those technologies where there isn't a high learning curve and it's not one of those technologies that gets in the way of learning. That's what I really like about it. Certainly, Nola identified the same thing as those pilots in the US, that students were having much greater, ah, much lower levels of stress and actively participating in lectures and discussions. And here we've got a few quotes from students from various campuses of Western Sydney, so I gather Nola piloted Audio Notetaker on all of the campuses last year with various students. But the fact that being able to download the lecture recordings, because they missed a lecture and then use the program to rigourously go through the lecture was important for Ingrid and certainly the ability for Morgan to capture her lectures online, highlight the bits and make a video and interestingly she puts her video on her TV at night. Should make a Netflix channel out of it perhaps! And there you go, that's great, there's a creative way that Morgan was using it. In particular, I like Arthur's quote, he’s from the Kingswood campus, where really he hit the nail on the head where he said that really it's the sort of program that all students could use regardless of the level of ability and it is a universal design tool and I'll talk a bit about how in a little while how some institutions are viewing this technology as a universal design tool and are using it to capture their lectures and provide students with an accessible format of lecture capture.   
DARLENE: Hi Jim, just sorry to interrupt you. It’s probably about 5 minutes, sorry it's Darlene here Jim, sorry to interrupt you. There's about 5 minutes to go, then 5 minutes for questions.   
JIM: Sure, I'd better hurry up then. So look, as I said, Nola and I will be doing a Webinar shortly, but what's come out of the pilot is that this year they are removing 200 note takers. I think they've purchased a 200-licence roll-out and with the view to looking to go a full-site licence in the future depending on the data they gather this year. And hopefully look at some sort of universal recording policy where Audio Notetaker format recordings can be part of the tool kit of content available to students. So you can see here, it's used by over 300 institutions as well as the ones I've mentioned here in Australia. We've got others, Griffith University, Swinburne, Flinders, Deakin and La Trobe are all using Audio Notetaker to some extent and so hopefully some of you in the audience who are from those institutions might like to share some information about that either today or in the near future. Quickly, there's an invitation open to all of you here and anyone who perhaps might view this recording afterwards who couldn't attend today that Sonocent is always keen to run pilot projects with institutions and we can help you with initial support and training of them and help you get started with it and have free access for a whole semester so you can gather your data. I won't talk about the dashboard management, but it's easy to manage the software with an on-line portal and that's the feedback we get about from institutions how good it is to do that. The other thing to mention, I think is probably a few of the FAQs that you might have pre-empted for me. Darlene, shall I answer these questions? Cause, they may actually be questions that the audience have considered and then if there's questions I hadn't thought of, we can finish with those.   
DARLENE: Yep, no, that’s fine. We actually haven't got any questions at the moment. So if people have got any other questions after this, please put it into the question pod. Thank you.   
JIM: Okay, so quickly the audio quality of the recording, what's it like? Certainly on mobile devices now, it is a very good-quality recording. If students use a laptop, I think you can get some really nice attached USB microphones that turn the other way to capture that. But, let's say the student came into a lecture late and they sat in a position that wasn't ideal. They were able to capture and annotate the recording, but when they listened back to it later that evening it's really hard to hear it well. If they've got auditory processing challenges it makes it difficult. It doesn't matter. If the lecture was captured by the institution, the student can go to the learning management system, download the lecture capture recording and it will replace their poor-quality audio recording in the program with the institution's lecture recording and it will still retain all the colour codes, all the annotations and everything else. So that's a really clever part of the technology. In terms of transcription, it does link in with Dragon. So if a student has Dragon on their computer you can actually click a button and it will transcribe your audio or your colour-coded audio into colour-coded corresponding text. So all the red bits of audio will be red text. All the green bits of audio will be green text. The issue there is not so much the technology, but the way that the lecturer is speaking, because we know that with Dragon you need to be dictating and in a lecture they're not dictating and so there'll be variable results with that. But certainly students who are Dragon users can use Audio Notetaker to make voice notes of themselves and transcribe them effortlessly. I'll talk a bit about Words to Note, very quickly. I've already mentioned to you about the reduction of peer note takers and I've mentioned to you that getting to know the program is fairly straightforward for students. So do we want to talk about this new academic transcription service that's available from Words to Note and it's endorsed and associated with Sonocent. So an institution purchases, say, a few hundred minutes of transcription time and I'll bring up on the next slide the log-in for the institution. So here you can see it shows on the far right how much time they've got left. So there's 100 minutes left in the account. They can go and purchase more and then underneath "manage users" it lists the student names. I've allocated the first student 100 minutes, the second student 50 minutes. So what you can do as an institution is you can now strategically allocate minutes to specific students who need that transcription service. On the next slide you can see this is the student log-in. So the student's been given, say, 30 minutes of time and they've used 19 minutes of it to transcribe a recording from Audio Notetaker. Now hopefully over time what will happen is the student will upload the summary of the recording, not the initial recording that they had. It might be a 1-hour lecture, but they've summarised it, created a summary that's, say, 25-30 minutes long and they've uploaded that for transcription. So that's been very strategic. It saves money, but the more important thing to me is that it's a bit more strategic about how you use that service. So we're going to have more announcements about that, because at the moment this service is only just rolled out for the US and the UK. But I've already had emails from a number of Australian institutions and I've relayed that back to Sonocent, and so we're really fast-tracking what can be done to put this in place for Australian institutions who may be interested in this and is ... Yep, so, I think we are near the end and you can see here the last three slides are all the references for your access and here are my contact details. As I mentioned before, the invitation is open to anyone to contact me. We would love to assist you in starting up a pilot project if you wish to do so and certainly if you already have the program, we're always there to help assist you with any issues that you have, or to hear from you about all the successes you're having, because that's what - that's what I do my work for. I love seeing the changes in students and I've worked with a number of students in a whole range of technologies and certainly in my Audio Notetaker workshops it's been fantastic to see the change in some students' anxiety and approach to their learning. So thank you and if you have any questions, we've got a minute, have we, I guess?   
DARLENE: A couple of minutes, so thank you very much for that. It's fantastic and as I said at the start, I learn something new every time and keep thinking every time I go to a conference I must be using it. I'm getting more motivated to start. We just have a question in regards to disclosure and permission to record from other students and teaching staff. One of the universities have been unable to record mostly in law lectures. Have you come across that and has there been any solutions that you've found?   
JIM: I think every institution approaches it in different ways. I do know at University of Adelaide, what happens there - and correct me if I'm wrong Ngaire, I think I saw Ngaire in the audience – but I think the students negotiate having some sort of agreement after a meeting with the disability adviser and they have some sort of slip or permission slip that's been prearranged as part of the procedure to show the lecturer. So there's a whole lot of conditions under which that recording can be used, and only used in private by the student, that they have to adhere to. I think that's probably a very good way to go for institutions who are very concerned about those faculties where there's sensitive information. I can't really add more to that. I think every university addresses their privacy policy in different ways and really it has to go back to that doesn’t it.   
DARLENE: That's fine and Ngaire has responded that what you said Jim is that that request, the reasonable adjustments for that specific student as needed, so with the school or faculty that is saying no. But it might also be an interesting question Michelle for AustEd too, just to get some more advice if it hasn't been asked before. We've just got a question in regards to the experience for students who are deaf. Have they been using this? Have you had that across the research areas and what's been used there?   
JIM: Certainly students with some hearing loss, but I haven't got specific details about what level of loss that would be, but for students who are deaf, that'll be just a big challenge I guess depending on the level of hearing loss there is. But certainly, it does have in it some really powerful audio technology. The program was built by a lecturer with degrees and he lectured in sound engineering and that's why it's got that audio replace tool, but it also has clean-up tools, so Audio Notetaker can remove the reverberations and humming and keyboard clicks, background noise to try and make the recording as high quality as possible and even though it's not a big file size it's a very, very high-quality audio recording.   
DARLENE: Yep, excellent. And Ngaire also reaffirmed that the students with hearing loss, it's been quite good. Also, has there been much trialled in high school and for students there, or has it mainly been focussed around -?   
JIM: Yes, it has. In the UK, yes because in the UK it has, because obviously that's where the program started and high school teachers there, English teachers use it a lot. For example, in the UK, one of the exams is an unseen poem that students have to listen to and then have to find the metaphors and similes and so students actually use Audio Notetaker to find read poetry on YouTube and they import it into Audio Notetaker and annotate the similes and metaphors and so on. So it's very powerful for that, but it's also really powerful for students. Here in South Australia I've been working with a few schools who've used it, because we have a required subject called Research Project where students have to go and interview different people about a topic of their choice and then create a video from that or a narrated PowerPoint. They've used Audio Notetaker, because it's been so much simpler to go back in and cut and paste the audio and make a little presentation to submit to the exam board. But I think the other thing that I think would be great for schools to think about is that when students come into higher education, they do come, many do come with very poor note-taking skills and it could be that Audio Notetaker is an option that can be used to help scaffold that development of study skills and note-taking skills and certainly students should start to use those sort of technologies that can help equip them for post-school study.   
DARLENE: Excellent, well we've gone over time. There's a couple more questions there. I'm sure Jim will be happy to answer those post-webinar. Everything will be posted on ADCET. We'll have the PowerPoint presentation, the Webinar and also the questions and answers from today, because there's been some great questions.   
JIM: And can I mention in closing that I will be visiting, I do visit States in other work and somehow if people want to contact me about coming onsite, because onsite training can be done, I can then sort of work out my times with my other commitments. For example, I'll be going to Melbourne a couple of times soon. So that's another option, too, if you want to have something face-to-face, or we can do webinars, yep.   
DARLENE: Excellent. That's brilliant. Well, thank you from ADCET and all of us here and everybody around Australia today. It was fantastic hearing, and about the new changes that are happening as well so things are certainly progressing in this area. So thank you Jim for your time and thank you to everybody for joining us.

JIM: Thank you very much.

DARLENE: We haven't got another Webinar coming up as yet, but will keep you posted. If anyone has any ideas, please shoot us an email. Thank you everybody, and have a great day.